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Date of Deposit: December 20, 2004

George E. Haas  
George E. Haas, Reg. No. 27,642

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Eaton Corporation

Art Unit: 2863

Serial No. 10/727,884

Examiner: Le, John H.

Filed: December 4, 2004

For: Method for Configuring an Operational  
Characteristic of a Proximity Sensor

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**AMENDMENT**

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Mail Stop Amendment  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Office Action mailed on October 20, 2004, please amend the above-identified patent application as follows:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks** begin on page 8 of this paper.

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circuit and its Q-factor that produce the given numerical value, however that patent does not mention normalizing the given numerical value nor doing so in the claimed manner.

Independent claim 16 is patentable for the reasons stated above regarding claim 1 and claim 17 is not taught by the earlier Christensen patent on the same basis as claim 10.

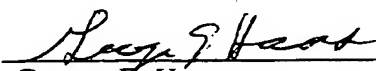
Claim 18 calls for multiplying the signal count by a gain factor to produce a normalized signal. However nothing in the Christensen patent teaches multiplying the count. The rejection cited the resonant circuit Q-factor as a gain factor. However, the Q-factor is the characteristic of the resonant coil that produces the signal pulses that are counted and does not thereafter multiply that count.

#### Conclusion

Therefore the Office Action has failed to show how the Christensen patent teaches the present method for operating a proximity sensor. As a consequence, claims 1-3, 5, 8-11 and 13-20 are not anticipated under 35 U.S.C. §102. Reconsideration and allowance of the present application are requested.

Respectfully submitted,  
Timothy A. Christensen, *et al.*

Dated: December 20, 2004

By:   
George E. Haas  
Registration No. 27,642

Quarles & Brady LLP  
411 E. Wisconsin Avenue Suite 2040  
Milwaukee, WI 53202-4497  
Telephone (414) 277-5751

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*Dec. 8, 2004*  
**PATENT APPLICATION FEE DETERMINATION RECORD**  
 Effective ~~October 1, 2004~~

Application or Docket Number

*10/727884*

**CLAIMS AS FILED - PART I**

	(Column 1)	(Column 2)
TOTAL CLAIMS		
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	minus 20 =	*
INDEPENDENT CLAIMS	minus 3 =	*
MULTIPLE DEPENDENT CLAIM PRESENT <input type="checkbox"/>		

\* If the difference in column 1 is less than zero, enter "0" in column 2

SMALL ENTITY TYPE ☐ OR OTHER THAN SMALL ENTITY

RATE	FEE		RATE	FEE
BASIC FEE	395.00	OR	BASIC FEE	790.00
<i>x 25</i>		OR	<i>x 50</i>	
<i>x 100</i>		OR	<i>x 200</i>	
<i>+ 180</i>		OR	<i>+ 360</i>	
TOTAL		OR	TOTAL	

**CLAIMS AS AMENDED - PART II**

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	* <i>20</i>	Minus	** <i>20</i> =
Independent	* <i>3</i>	Minus	*** <i>3</i> =
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

SMALL ENTITY OR OTHER THAN SMALL ENTITY

RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
<i>x 25</i>		OR	<i>x 50</i>	
<i>x 100</i>		OR	<i>x 200</i>	
<i>+ 180</i>		OR	<i>+ 360</i>	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total		Minus	** =
Independent		Minus	*** =
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
<i>x 25</i>		OR	<i>x 50</i>	
<i>x 100</i>		OR	<i>x 200</i>	
<i>+ 180</i>		OR	<i>+ 360</i>	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	*	Minus	** =
Independent	*	Minus	*** =
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
<i>x 25</i>		OR	<i>x 50</i>	
<i>x 100</i>		OR	<i>x 200</i>	
<i>+ 180</i>		OR	<i>+ 360</i>	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.  
 \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."  
 \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."  
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.